

Cutting / Welding / Heating Outfits

Dual Guard™ Heavy Duty Cutting, Welding & Brazing Outfits

Cuts up to 8"- welds up to 1"

These premium heavy duty outfits feature Smith's revolutionary Dual Guard™ system which combines a flashback arrestor built into the torch head with proven in-tip gas mixing technology. This combination greatly improves operator safety and increases torch life. Dual Guard™ torches are covered by Smith's Lifetime Warranty, the longest and strongest in the industry. Smith regulators are covered by a 3 year limited warranty. The outfits feature rugged, highly accurate regulators with 2-1/2" gauges and shatter resistant polycarbonate lenses. Outfits are complete with safety and operations manual. All outfits include 2 cutting tips, welding tip, heating tip, tip cleaner.



Part No. HD-510

Part No.	Fuel Gas	Torch Handle	Cutting Attachment	Cutting Tip	Welding Tips	Heating Tip	Oxygen Regulator	Fuel Gas Regulator	Accessories
HD-H510A	Acetylene	WH200	DG209	SC12-00 SC12-1	SW205	ST603	HB1510-540 CGA 540	HB1521-510 CGA 510	Lighter, goggles, 20 ft. 1/4" twin hose, tip cleaner, manual.
HD-H300A	Acetylene	WH200	DG209	SC12-00 SC12-1	SW205	ST603	HB1510-540 CGA 540	HB1520-300 CGA 300	Lighter, goggles, 20 ft. 1/4" twin hose, tip cleaner, manual
HD-H510	Acetylene	WH200	DG209	SC12-00 SC12-1	SW205	ST603	HB1510-540 CGA 540	HB1521-510 CGA 510	Tip cleaner
HD-H300	Acetylene	WH200	DG209	SC12-00 SC12-1	SW205	ST603	HB1510-540 CGA 540	HB1520-300 CGA 300	Tip cleaner

NOTE: Capacity with tips supplied in outfit: cuts up to 5/8", welds up to 1/8". Torch Handle includes reverse flow check valves.

Dual Guard™ Heavy Duty Toolbox Outfits

Cuts up to 8"- Welds up to 1"

These premium heavy duty outfits feature a rugged, high impact plastic toolbox with steel latches to safely transport oxy-fuel equipment. Also features Smith's revolutionary Dual Guard™ system which combines a flashback arrestor built into the torch head with our proven in-tip gas mixing technology. This combination greatly improves operator safety and increases torch life. Dual Guard™ torches are covered by Smith's Lifetime Warranty, the longest and strongest in the industry. Smith Series 30™ regulators are covered by a 3 year limited warranty. Features rugged, highly accurate regulators with 2" gauges and shatter resistant polycarbonate lenses. Complete with safety and operations manual.



Part No. HD-510T

Part No.	Fuel Gas	Torch Handle	Cutting Attachment	Cutting Tip	Welding Tips	Heating Tip	Oxygen Regulator	Fuel Gas Regulator	Accessories
HD-510T	Acetylene	WH200	DG209	SC12-0 SC12-1	SW205	ST603	30-100-540 CGA 540	30-15-510 CGA 510	Lighter, goggles, 20 ft. 3/16" hose, check valves, tip cleaner

NOTE: Capacity with tips supplied in outfit: cuts up to 5/8". Torch Handle includes reverse flow check valves.

Also available: **Part No. HD-300T** - CGA 300 version

Cutting / Welding & Heating Outfits

Dual Guard™ Heavy Duty Hand Cutting Torch Outfits

Cuts up to 24"

Smith's heavy-duty hand cutting torch outfits are built for the toughest jobs. They feature the SC229 straight cutting torch with restarts. All torches are covered by Smith's Lifetime Warranty. The outfits feature rugged, highly accurate regulators with shatter resistant polycarbonate lenses. Regulators are covered by a 3 year limited warranty. Outfits are available in boxed outfits with premium heavy duty regulators or in the tool box style with Series 30™ medium duty regulators.



Part No. HT3-H510S



Part No. HT2-MD510T

Straight Hand Torch Outfits with Heavy Duty Regulator with Hard Hat™

Part No.	Fuel Gas	Cutting Torch	Cutting Tip	Oxygen Regulator	Fuel Gas Regulator
HT3-H510S	Acetylene	SC229	SC12-2	HB1510A-540S	HB1521B-510S*
HT3-H300S	Acetylene	SC229	SC12-2	HB1510A-540S	HB1520B-300S*

* Includes Hard Hat™ protect gauges from damage for greater safety and less repair.

Straight Hand Torch Toolbox Outfits with Series 30™ Medium Duty Regulator

Part No.	Fuel Gas	Cutting Torch	Cutting Tip	Oxygen Regulator	Fuel Gas Regulator	Accessories
HT2-MD510T	Acetylene	DG229	SC12-1 SC12-2	30-100-540 CGA 540	30-15-510 CGA 510	Soft side goggles, lighter, 20' x 3/16" twin hose, check valves, tip cleaner & operations manual
HT2-MD300T	Acetylene	DG229	SC12-1 SC12-2	30-100-540 CGA 540	30-15-300 CGA 300	

Dual Guard™ Medium Duty Cutting, Welding & Heating Outfits

Cuts up to 6"- Welds up to 1/2"

These premium outfits feature quality construction throughout and are built to provide reliability and extended service. Toolbox outfits feature a rugged, high impact plastic toolbox. Torches feature Smith's revolutionary Dual Guard™ design which combines a flashback arrestor built into the torch head with our proven in-tip gas mixing technology. This combination greatly improves operator safety and increases torch life. Dual Guard™ torches are covered by Smith's Lifetime Warranty, the longest and strongest in the industry. The outfits feature rugged, highly accurate Series 30™ regulators which include Smith's Sure-Seat™ filtered seat technology and shatter resistant polycarbonate lenses. Regulators are covered by a 3 year limited warranty. Outfits are complete with safety and operations manual.



Part No. MD-510T



Part No. MD-510A



Part No.	Fuel Gas	Torch Handle	Cutting Attachment	Cutting Tip	Welding Tips	Heating Tip	Oxygen Regulator	Fuel Gas Regulator	Accessories
MD-510A	Acetylene	WH100	DG109A	MC12-0 MC12-1	MW205	MT603	30-100-540 CGA 540	30-15-510 CGA 510	Soft side goggles, lighter, 20' x 3/16" twin hose, check valves, tip cleaner & operations manual
MD-510T*	Acetylene	WH100	DG109A	MC12-0 MC12-1	MW205	MT603	30-100-540 CGA 540	30-15-510 CGA 510	
MD-300T*	Acetylene	WH100	DG109A	MC12-0 MC12-1	MW205	MT603	30-100-540 CGA 540	30-15-300 CGA 300	
MD-510MPT*	MAPP®, Propylene	WH100	DG109A	MC90-1		MT815	30-100-540 CGA 540	30-50-510 CGA 510	
MD-510LPT*	Propane	WH100	DG109A	MC40-1		MT615	30-100-540 CGA 540	30-50-510 CGA510	
MD-510	Acetylene	WH100	DG109A	MC12-0 MC12-1	MW205	MT603	30-100-540 CGA 540	30-15-510 CGA 510	Check valves only

* Tool Box Outfit

NOTE: Capacity with tips supplied in outfits: cuts up to 5/8", welds up to 1/8". Reverse flow check valves- torch handle mount.

NOTE: Toolbox outfits minimum order - 2 of the same part no., ship 2 to a carton.

Cutting & Welding Outfits

Toughcut™ Medium Duty Cutting & Welding Outfits

Cuts up to 6" – welds up to 1/2"

Versatile Toughcut™ cutting and welding outfits include many features found on more expensive outfits. The Toughcut™ series is perfect for a multitude of applications such as farm, ranch, hobby, automotive, refrigeration, light fabrication, and repair. Outfits are available with rugged, reliable Smith Series 30™ medium duty regulators. The torch and regulators are covered by a 3 year limited warranty. Complete operation and instruction manual also included. All outfits include 1 cutting tip, welding tip and reverse flow check valves.



Part No. MB55A-510

Part No.	Fuel Gas	Torch Handle	Cutting Attachment	Cutting Tip	Welding/ Brazing Tip	Heating Tip	Oxygen Regulator	Fuel Gas Regulator	Accessories
MB54A-510	Acetylene	CW5A	CC509P	MC12-1	MW205		30-100-540 CGA 540	30-15-510 CGA 510	Goggles, lighter, twin hose, check valves
MB54A-300	Acetylene	CW5A	CC509P	MC12-1	MW205		30-100-540 CGA 540	30-15-300 CGA 300	
MB55A-510	Acetylene	CW5A	CC509P	MC12-1	MW205	MT603	30-100-540 CGA 540	30-15-510 CGA 510	
MB55A-300	Acetylene	CW5A	CC509P	MC12-1	MW205	MT603	30-100-540 CGA 540	30-15-300 CGA 300	
MB54-510L	Acetylene	CW5A	CC509P	MC12-1	MW205		30-100-540 CGA 540	30-15-510 CGA 510	Check valves & soft side goggles
MB54-300L	Acetylene	CW5A	CC509P	MC12-1	MW205		30-100-540 CGA 540	30-15-300 CGA 300	

NOTE: Capacity with tips supplied in outfit: cuts up to 5/8", welds up to 1/8"

The Little Torch™ Outfit For Disposable Tanks

Great for jewelry repair & manufacture, hobby & crafts, metal sculpture, glass blowing, plumbing, electronics & repair. Hoses may be connected to any standard oxy-fuel regulators



The Little Torch™



Part No. 23-1001D

Part No.	Description
23-1001D	Includes torch, 5 curved tips, 8' hose and instruction manual. Packaged in display box as shown ("B" hose connections fuel 9/16"-18-LH, Oxygen 9/16"-18-RH)
23-1003	Kit with regulator fitted for acetylene (for "MC" tank) 10 cu. ft. cylinder. Includes 11-1104C torch, #2-6 tips, 30-15-200 fuel regulator, 30-20-540 oxygen regulator, check valves, 8' (2.4 m) covered hoses and instruction manual.
23-1003B	Includes torch, #2-6 tips, 30-15-520 acetylene regulator (for "B" 40 cubic foot tank), 30-20-540 oxygen regulator, reverse flow check valves, 8' (2.4 m) covered hoses and instruction manual.
23-1003P	Kit with regular fitting for propane or larger industrial acetylene cylinders over 40 cubic feet. Includes 11-1101C torch, #3-7 tips, 30-15-510 fuel regulator, 30-20-540 oxygen regulator, reverse flow check valves, 8' (2.4 m) covered hoses and instruction manual.
23-1014	Includes 249-499 oxygen regulator, 249-500 propane regulator for disposable tanks, cylinder holder, 11-1101C torch, #5 tip, 8' hose and instruction manual. Allows maximum portability and may be used in locations where larger pressurized cylinders are not allowed.

Replacement Tips



Part No. 12-1401-07



Part No. 1-1402-03



Part No. 129-124-04

Part No.	Single Flame Curved			Size	Use with Oxygen and:
	Twin Flame	Straight			
12-1401-02				2	Acetylene & hydrogen only Any fuel gas including acetylene and hydrogen
12-1401-03	12-1402-03			3	
12-1401-04	12-1402-04	129-124-04		4	
12-1401-05	12-1402-05			5	
12-1401-06	12-1402-06			6	
12-1401-07				7	

Cutting Torches

Dual Guard™ - Extra Heavy Duty

Cuts Up To 24"

Dual Guard™ hand cutting torches are built for the toughest jobs. They feature a built-in head flashback arrestor, reversible cutting lever and ease-on oxygen for smooth starts. It's also designed with a heavy wall manganese bronze head for durability and resistance to heat warping.

All Dual Guard™ torches are covered by Smith's Lifetime Warranty. **100% tested and inspected.**

- 3 tube "in-tip" mix design keeps gases separated until reaching the tip.
- Reversible lever, for top or bottom mounting.
- Exceptional ease-on oxygen feature.
- Uses long lasting "Soft Seat" Graf-Tite® cutting tips.
- Replaceable hose connections.
- Wide array of cutting, gouging and specialty tips available.
- Versatile- for use with acetylene, propane, propylene, MAPP® and many other gases.
- Superior "ease-on" cutting jet action reduces tip-clogging and slag blow-back in piercing operations.



Part No. DG929B

Part No.	Head Angle	Length	Weight	Tips
DG925B	75°	21"	3-1/2 lbs.	Oxygen/ Acetylene: SC12-00 thru SC12-6, SC56-1 thru SC56-9 Oxygen/ propane Oxygen/ propane based: SC40-0 thru SC40-4, SC46-2, SC46-4 & SC46-6, SC50-0 thru SC50-9
DG929B	90°	21"	3-1/2 lbs.	Oxygen/ propylene: SC60-1, SC60-2, SC2-2, SC2-4 Oxygen/ MAPP®: SC90-00 thru SC90-5, SC56-1 thru SC56-9

NOTE: Includes sintered inlet filters.

Gas Axe™ - Extra Heavy Duty

Cuts Up To 24"

Safety engineered and designed for severe cutting application; excellent for use with propane, natural gas, acetylene, and MAPP® gas. Smith's extra heavy duty Gas Axe™ is designed for high-speed severe service scrap and demolition cutting and extra high capacity cuts up to 24" thick.

- Manganese bronze head provides super tough thick walls to prevent head heat warping and damage.
- Three tube construction keeps gases separated, eliminating mixing tube burnout. Smith's thick wall, high capacity stainless steel tubes with reinforced tube supports provide high gas flow and superior strength.
- Reversible ergonomic ribbed handle adds comfort and reduces operator fatigue.
- Stainless steel ball-style valve provided smooth adjustment and positive seating for easy shut-off.
- Hose connections are replaceable if the threads should become damaged.
- 1 year limited warranty.



Part No. SC225

Part No.	Head Angle	Length	Tips
SC935	75°	3'	Oxygen/ Acetylene: SC12-00 thru SC12-6, SC56-1 thru SC56-9
SC939	90°	3'	
SC930	180°	3'	
SC945	75°	4'	
SC949	90°	4'	Oxygen/ propane, Oxygen/ propane based: SC40-0 thru SC40-4, SC46-2 thru SC46-6, SC50-0 thru SC50-9
SC940	180°	4'	
SC955	75°	5'	Oxygen/ propylene: SC60-0 thru SC60-6, SC2-2, SC2-4
SC959	90°	5'	
SC950	180°	5'	Oxygen/ MAPP®: SC90-00 thru SC90-5, SC56-1 thru SC56-9
SC965	75°	6'	
SC969	90°	6'	
SC960	180°	6'	

Cutting Torches

Dual Guard™ - Standard Duty

Cuts Up To 12"

Features solid construction and top handling ease for hundreds of jobs in construction, fabricating, shipyards, salvage and other related industries. Silver brazed joints throughout. Head and butt are machined from dense brass forgings. Ball style control valves provide positive gas shut-off. All SC Series torches listed below are covered by Smith's Lifetime Warranty. **100% tested and inspected.**

- 3 tube "in-tip" mix design keeps gases separated until reaching the tip.
- Reversible lever, top or bottom mounting.
- Uses long lasting "Soft Seat" Graf-Tite™ cutting tips.
- Replaceable hose connections and sintered filters.
- Wide array of cutting, gouging and specialty tips available.
- Versatile- for use with acetylene, propane, propylene, MAPP® and many other gases.
- "Ease-on" cutting jet action reduces tip-clogging and slag blow-back in piercing operations.
- Head made of heavy duty manganese bronze. Available with 75°, 90° and 180° angle.



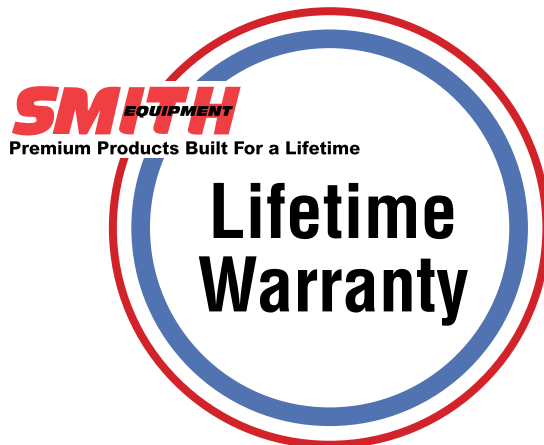
Part No. DG229



Part No. SC225

Dual Guard™ Part No.	SC Series Part No.	Head Angle	Length	Tips
DG225	SC225	75°	20-1/2"	Oxygen/ acetylene: SC12-00 thru SC12-6, SC56 thru SC56-6 Oxygen/ propane Oxygen/ propane based: SC40-0 thru SC40-4, SC46-2 thru SC46-6, SC50-0 thru SC50-6 Oxygen/ propylene: SC60-1, SC60-2, SC2-2, SC2-4 Oxygen/ MAPP®: SC90-00 thru SC90-5, SC56-1 thru SC56-6
DG229	SC229	90°	20-1/2"	
DG220	SC220	180°	21"	

NOTE: May be used with all Heavy Duty Special Purpose Tips and include sintered metal inlet filters.



MADE IN USA 

Cutting Attachments

Dual Guard™ - Heavy Duty

Features The Dual Guard™ System and cuts up to 8" thick steel. Solid silver brazed construction. Features "O" ring seating and easy-to-change slip-in Graf-Tite® cutting tips with cost saving soft-seats. Covered by the Lifetime Warranty & Service Agreement. Use with any industrial equal pressure fuel gases- acetylene, propane, natural gas, propylene, hydrogen, MAPP®, and many others. Several models of standard and special purpose tips are available.

- Used with - Part No. WH200 (torch handle) Also fits: SW1, SW1A, SW1B
- Valve assembly replacement: 13936 (also for SC Series)



Part No. DG209

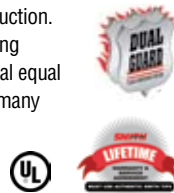
Part No.	Length	Weight	Style	Head Angle	Tips
DG205	12-1/2"	1 lb. 15 oz.	HD	75°	Oxygen/ Acetylene: SC12-00 thru SC12-5, SC56-1 thru SC56-5 Oxygen/ propane Oxygen/ propane based: SC40-0 thru SC40-4, SC50-1 thru SC50-5, SC2-2 thru SC2-4 Oxygen/ propylene: SC60-0 thru SC60-5, SC2-2 thru SC2-4 Oxygen/ MAPP®: SC90-00 thru SC90-5, SC56-1 thru SC56-5 SC Series Special Purpose Tips except SC83, SC112 & obs
DG209	12-1/2"	1 lb. 15 oz.	HD	90°	

NOTE: DG200 Series supercedes SC200 and SC500 Series cutting assemblies.

Dual Guard™ - Medium Duty

Features The Dual Guard™ System and cuts up to 6" thick steel. Solid silver brazed construction. Features "O" ring seating and easy-to-change slip-in Graf-Tite™ cutting tips with cost saving soft-seats. Covered by the Lifetime Warranty & Service Agreement. Use with any industrial equal pressure fuel gases- acetylene, propane, natural gas, propylene, hydrogen, MAPP®, and many others. Several models of standard and special purpose tips are available.

- Used with - **Part No. WH100** (torch handle). Also fits: MW5, MW5A
- Valve assembly replacement 7588 (also for MC500 & AC300 Series)



Part No. DG109A

Part No.	Length	Weight	Head Angle	Tips
DG109A	11-1/4"	1 lb. 3 oz.	90°	All MC Series cutting & special purpose tips

NOTE: DG100 Series supercedes MC500 Series cutting assemblies.

CC509P - Medium Duty (Economy)

Popular medium duty cutting attachment easily cuts up to 6" steel. Solid construction to last a lifetime - silver brazed joints, stainless steel tubes, brass forged butt and head. Has the same quality features and construction as the larger and heavier Dual Guard™ attachment. Use with any industrial medium pressure fuel gases- acetylene, propane, butane, natural gas, propylene, HPG®, MAPP®, hydrogen and many others. **100% tested & made in the USA**

- Used with - Part No. WH100 (torch handle). Also fits MW5, MW5A



Part No. CC509P

Part No.	Length	Weight	Head Angle	Tips
CC509P*	11-1/4"	1 lb. 2 oz.	90°	Oxygen/ acetylene: MC12-00 thru MC12-5 Oxygen/ propane: MC40-0 thru MC40-3 Oxygen/ propane based: MC40-0 thru MC40-3 Oxygen/ propylene: MC60-1 thru MC60-2 Oxygen/ MAPP®: MC90-1, MC90-2, MC Series special purpose tips

* Supplied in Toughcut™ Outfits

Airline™ - Standard Duty Cutting Attachments

Fits into AW1A torch handle to form a small light weight cutting torch with cutting capacity up to 3" steel. Has same quality construction and features built into each cutting attachment. Covered by the Lifetime Warranty & Service Agreement.

- Used with - AW1A or AW10A (torch handles).



Part No. AC309

Part No.	Head Angle	Tips
AC309	90°	Oxygen/ acetylene: MC12-00 thru MC12-4 Oxygen/ propane oxygen/ propane based: MC40-0 thru MC40-3 Oxygen/ propylene: MC60-1 thru MC60-4 Oxygen/ MAPP®: MC90-1, MC90-2, MC Series Special Purpose Tips

Torch Handles

WH200 - Heavy Duty

Cuts up to 8"- Welds up to 1"

Rugged torch handle for high volume heating tips and general purpose welding, brazing and cutting. Features rugged silver brazed construction, forged brass butt, solid brass seat, and fluted easy grip handle. Needle valves are ball type for positive seat and accurate flame control; guards against uneven valve wear to assure safer, longer trouble-free operation. Has Teflon® packing for excellent flow control. Replaceable inlet check valves fit "B" size hose nuts, 9/16" - 18 right and left hand. Covered by the Lifetime Warranty & Service Agreement. Supercedes: SW1, SW1A, SW1B

- Valve assembly replacement: G729-5A

Part No.	Length	Weight	Handle Diameter	Used With		
				Cutting Attachments	Welding Tips	Heating Tips
WH200	7-1/2"	17-3/8 oz.	1"	SC209, SC200, SC205, SC509, DG205, DG209, DG200	SW200, SW400	ST600, ST800



Part No. WH200

WH100 - Medium Duty

Cuts up to 6"- Welds up to 7/8"

Easy handling, high quality mid-size torch handle. Handles all but the highest volume heating and heaviest welding needs. Features rugged silver brazed construction, forged brass butt and precision machined brass head. Ball type needle valves reduce uneven valve wear and provide easy flame adjustment. Inlet connections, 9/16"-18 right, left hand, fit "B" size hose nuts. Covered by the Lifetime Warranty & Service Agreement. Supercedes: MW5, MW5A

- Valve assembly replacement: LW17

Part No.	Length	Weight	Handle Diameter	Used With		
				Cutting Attachments	Welding Tips	Heating Tips
WH100	7"	14 oz.	15/16"	MC505, MC509, DG105, DG109A	MW200	MT600, MT800



Part No. WH100

AW1A Airline™ - Standard Duty

Cuts up to 3"- Welds up to 1/2"

Specially designed to handle standard duty welding, brazing, cutting and fabricating. Lightweight and compact size provide easy handling, even in confined areas. Needle valves located at front end for easy one-hand flame adjustment. Inlet connections 3/8" - 24 right and left hand, fit "A" size hose nuts. Covered by the Lifetime Warranty & Service Agreement.

- Valve assembly replacement: AW11A

Part No.	Length	Weight	Handle Diameter	Used With			
				Cutting Attachments	Welding Tips	Heating Tips	Twin Flame Tips
AW1A	5-3/4"	6-1/8 oz.	11/16"	AC309	AW200	AT600	AT600, AT600X6



Part No. AW1A

AW10A High Volume - Standard Duty

Cuts up to 3"- Welds up to 1/2"

Larger size torch handle provides increased gas flow. Ball type valves provide fine flame adjustment. Long valve thread engagement in Teflon® packing prevents flame fluctuation and stops valve wobble. Inlet connections, 9/16" - 18 right and left hand, fit "B" size hose nuts. Covered by the Lifetime Warranty & Service Agreement.

- Valve assembly replacement: LW17

Part No.	Length	Weight	Handle Diameter	Used With			
				Cutting Attachments	Welding Tips	Heating Tips	Twin Flame Tips
AW10A	6-3/4"	14 oz.	15/16"	AC309	AW200	AT600	AT600, AT600X6



Part No. AW10A

Cutting Tips

SC Cutting Tips - For Heavy Duty Torches

Smith's cutting tips are swaged from high quality copper to assure smoothest possible gas passages and fastest, most efficient cutting. All Smith cutting tips feature the slip-in design that hand-tightens to form a perfect, positive seal, protected recessed heat resistant seats and the extra safety of in-tip mixing. Replacement seats G931 (high pressure); G932 (low pressure). For use with heavy duty SC and DG series of torches.



Part No. SC12



Part No. SC40



Part No. SC56

Cutting Range	Acetylene		2-Piece Tips Propane		2-Piece Tips Propylene	2-Piece Tips MAPP®	
	6 Pre-heats	Heavy Preheat	Medium Preheat	Heavy Preheat	Medium Preheat	Heavy Preheat	Medium Preheat
Up to 3/16"	SC12-00				SC60-00		SC90-00
1/4" - 3/8"	SC12-0		SC40-0	SC50-0	SC60-0		SC90-0
1/2" - 5/8"	SC12-1	SC56-1	SC40-1	SC50-1	SC60-1	SC56-1	SC90-1
3/4" - 1-1/4"	SC12-2	SC56-2	SC40-2	SC50-2	SC60-2	SC56-2	SC90-2
1-1/2" - 2"	SC12-3	SC56-3	SC40-3	SC50-3	SC60-3	SC56-3	SC90-3
2-1/2" - 4"	SC12-4	SC56-4	SC40-4	SC50-4	SC60-4		SC90-4
5" - 8"	SC12-5	SC56-5		SC50-5	SC60-5	SC56-5	SC90-5
10" - 12"	SC12-6	SC56-6		SC50-6	SC60-6		
13" - 14"		SC56-7		SC50-7		SC56-7	
15" - 18"		SC56-8		SC50-8			
19" - 20"		SC56-9		SC50-9		SC56-9	
21" - 24"		SC56-9				SC56-9	

MC Cutting Tips - For Medium and Light Duty Torches

Smith's MC cutting tips have the same high quality construction and features of the larger, heavier duty SC series tips. Replacement seats G695 (high pressure), G694 (low pressure). Cutting attachments include: MC505, MC509, AC309, DG109A, CC509P.



Part No. MC40

Cutting Range	Acetylene	2-Piece Tips Propane	2-Piece Tips Propylene	2-Piece Tips MAPP®
	6 Pre-Heats	Medium Preheat	Medium Preheat	Medium Preheat
1/8" - 3/16"	MC12-00			
1/4" - 3/8"	MC12-0	MC40-0	MC60-0	
1/2" - 5/8"	MC12-1	MC40-1	MC60-1	MC90-1
3/4" - 1"	MC12-2	MC40-2	MC60-2	MC90-2
1-1/2" - 2"	MC12-3	MC40-3		
2-1/2" - 4"	MC12-4			
5" - 6"	MC12-5			

Special Purpose Tips - SC And MC

For use with straight cutting torches only.



Part No. SC13-3



Part No. SC14-3



Part No. SC15-2



Part No. SC17-0

Application	Capacity	Acetylene	Propane	MAPP®
Gouging	1/8" D x 1/4" W			
Gouging	1/4" D x 3/8" W	SC13-3, MC13-3	SC23-3	
Gouging	3/8" D x 1/2" W	SC13-5		SC23-5M
Rivet cutting	3/4" rivets			
Riser	1-1/2" rivets	SC14-3		
Rivet blowing & metal washing	3/8"-1/2"	SC15-2		
Plate cutting	3/8"	SC17-0		
Heating	83,000 BTU	SC83		

Welding, Brazing & Heating Tips

Exclusive Soft-Flame Welding and Brazing Tips

Smith's "Soft-Flame" welding and brazing tips provide concentrated heat for better "puddle" control. The turbulent-free flame eliminates puddle chasing for higher quality welding. The heavy wall copper gives greater resistance to reflected heat, permits cooler operation, and dissipates more heat than thin wall copper. Smith's slip-in tip design makes tip change quick and easy; takes just seconds, hand-tightened, no wrench necessary.



Welding Range (Metal Thickness)	Use in WH200 or SW1A		Use in WH100 or MW5A		Use in AW1A, AW10A	
	Acetylene	Propane	Acetylene	Propane	Acetylene	Propane
Up To:						
1/32"	SW201		MW201		AW201	
1/16"		SW403		MW403		
5/64"	SW203		MW203		AW203	
1/8"	SW205	SW405	MW205		AW205	
3/16"	SW207		MW207		AW207	
3/8"	SW209	SW409	MW209		AW209	
1/2"	SW210				AW210	
5/8"				MW411		
1" and over	SW214					
Repl. O-Ring	LW15		MW15		AW15	

Heating Tips

Fast, efficient Smith high capacity heating tips save money and reduce labor. Superior design provides high volume heat for bending, straightening, pre-heating, brazing, shrinking and more. Use recommended pressures with adequate gas supply for best performance. Manifolding cylinders may be required for safe and efficient operation of larger heating tips. Acetylene must not be withdrawn at more than 1/7 of cylinder capacity per hour.

- ST Series uses LW15 replacement O-rings.
- MT Series uses MW15 replacement O-rings.
- AT Series uses AW15 replacement O-rings.



Average BTU's Outlet	Use in WH200 or SW1A			Use in CW5A, WH100 or MW5A			Use in AW1A, AW10A
	Acetylene	Propane	MAPP®	Acetylene	Propane	MAPP®	Acetylene
40,125				MT603			
41,550							AT605
71,750	ST603						
73,085				MT605			
121,500						MT810	
124,670	ST605						
128,970				MT610			
194,890	ST610						
286,350		ST615			MT615		
421,000			ST815			MT815	
455,000		ST625					
614,195		ST635					
865,000			ST825				

Guards / Regulators

Hard Hat™ Regulator Guards

Protect regulators from costly gauge damage with Smith's Hard Hat™ gauge guards. Promotes safety, designed to help prevent broken gauges which can lead to gas leaks. Time and cost savings, helps prevent costly equipment down time and expensive repairs.

- HB190 Hard Hat™ is made from rugged steel. Bright yellow, baked enamel finish.
- Quickly and easily attaches to regulator.
- Fits: HB1500 series brass regulators.

Part No. HB190

- H195 Hard Hat™ is formed from impact-resistant Lexan™ resin, an extremely tough, durable polycarbonate.
- Bright safety yellow finish.
- Fits: Series 30™ regulators.

Part No. H195



Part No. HB190



Part No. H195

Regulators

HB1500 Series - Heavy Duty Brass

HB1500 series single stage regulators comprise a complete line of versatile regulators for welding, cutting, heating and other industrial applications. Heavy duty construction and simplified design provides high gas flow and longer trouble-free operation. 3 year limited warranty.



Part No. HB1521B-510S

Part No.	Gas Used	Delivery Pressure	Gauges (2 1/2" Dia.)		Inlet Connection	Outlet Connection	Max Inlet Pressure
			Inlet	Outlet			
Oxygen Regulators							
HB1510-540	Oxygen	0-150 PSIG 0-1000 kPa	4000 PSIG 28000 kPa	200 PSIG 1400 kPa	CGA 540	9/16"-18 RH "B"	3000 PSIG
HB1510-540S ²	Oxygen	0-150 PSIG 0-1000 kPa	4000 PSIG 28000 kPa	200 PSIG 1400 kPa	CGA 540	9/16"-18 RH "B"	3000 PSIG
Acetylene Regulators							
HB1520-300	Acetylene	0-15 PSIG 0-100 kPa	400 PSIG 2800 kPa	30 PSIG 200 kPa	CGA 300	9/16"-18 LH "B"	400 PSIG
HB1520-300S ²	Acetylene	0-15 PSIG 0-100 kPa	400 PSIG 2800 kPa	30 PSIG 200 kPa	CGA 300	9/16"-18 LH "B"	400 PSIG
HB1521-510	Acetylene	0-15 PSIG 0-100 kPa	400 PSIG 2800 kPa	30 PSIG 200 kPa	CGA 510	9/16"-18 LH "B"	400 PSIG
HB1521-510S ²	Acetylene	0-15 PSIG 0-100 kPa	400 PSIG 2800 kPa	30 PSIG 200 kPa	CGA 510	9/16"-18 LH "B"	400 PSIG
Propane, Propylene, MAPP® and Natural Gas Regulators							
HB1522-510	LP Gas	0-60 PSIG 0-350 kPa	400 PSIG 2800 kPa	60 PSIG 400 kPa	CGA 510	9/16"-18 LH "B"	400 PSIG
Other Gases							
HB1530-580	Nitrogen	0-275 PSIG 0-1900 kPa	4000 PSIG 28000 kPa	400 PSIG 2800 kPa	CGA 580	5/8"-18 RH Internal	3000 PSIG

¹ Flows above 100 SCFH CO₂ require minimum 80 PSIG outlet and heat may be needed to prevent freeze-up.

² Includes HB190 Hard Hat™ Gauge Guard.

Note: These regulators are not suitable in cryogenics or lox or other liquid gas systems.

Single Stage Regulators

Series 30™ Single Stage Regulators - Medium Duty

- These extremely durable regulators contain Smith's exclusive Sure Seat™ filtered seat technology for extended seat and regulator life. Filtered seat prevents contamination from entering the seating area reducing repair costs and down-time.
- Manufactured with a rugged forged body and corrosion resistance bright nickel-plated bonnet for added product durability.
- Dual safety features include self re-seating external pressure relief valve and diaphragm which is designed to rupture if high pressure seat fails.
- Highly accurate pressure gauges with shatter resistant lenses.
- High capacity flow capabilities of over 2800 SCFH with oxygen.
- Sensitive heavy duty laminated Neoprene® diaphragm.
- Made in U.S.A. with 3 year limited warranty.



Part No. 30-100-540

Part No.	Gas Used	Delivery Pressure	Gauges (2" Dia.)		Inlet Connection	Outlet Connection	Max Inlet Pressure
			Inlet	Outlet			
Oxygen Regulators							
30-100-540	Oxygen	0-100 PSIG 0-700 kPa	4000 PSIG 28000 kPa	150 PSIG 1000 kPa	CGA 540	9/16" - 18 RH "B"	3000 PSIG
Acetylene Regulators							
30-15-300	Acetylene	0-15 PSIG 0-100 kPa	400 PSIG 2800 kPa	30 PSIG 200 kPa	CGA 300	9/16" - 18 LH "B"	400 PSIG
30-15-510	Acetylene	0-15 PSIG 0-100 kPa	400 PSIG 2800 kPa	30 PSIG 200 kPa	CGA 510	9/16" - 18 LH "B"	400 PSIG
Propane, Propylene, MAPP® and Natural Gas Regulators							
30-50-510	LP Gas	0-50 PSIG 0-350 kPa	400 PSIG 2800 kPa	60 PSIG 400 kPa	CGA 510	9/16" - 18 LH "B"	400 PSIG
Other Gases							
30-150-580	Argon Nitrogen	0-150 PSIG 0-1050 kPa	4000 PSIG 28000 kPa	150 PSIG 1000 kPa	CGA 580	5/8" - 18 RH Internal	3000 PSIG
30-100-320*	CO ₂	0-100 PSIG 0-700 kPa	4000 PSIG 28000 kPa	150 PSIG 1000 kPa	CGA 320	5/8" - 18 RH Internal	3000 PSIG
30-100-350	Hydrogen Methane	0-100 PSIG 0-700 kPa	4000 PSIG 28000 kPa	150 PSIG 1000 kPa	CGA 350	9/16" - 18 LH "B" Internal	3000 PSIG

* Flows above 100 SCFH CO2 require minimum 80 PSIG outlet and heat may be needed to prevent freeze-up.

820 Series Single Stage Regulators - High Pressure

- This high pressure regulator series is for use on cylinders with a wide variety of non-corrosive inert gases.
- Piston sensor design gives structural reliability in high-pressure use.
- Features self-relieving adjusting knob for easy low torque adjustment, nickel-plated bonnet, body and easy to read 2-1/2" gauges for superior corrosion resistance.
- Made in the U.S.A with 3 year limited warranty.

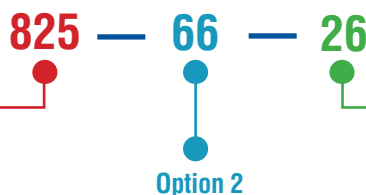
Typical Applications: High pressure testing, Purging and charging, calibration kits, chemical plants, manufacturing process and applications, research and development



Part No.	Max Inlet Pressure (PSIG)	Delivery Pressure	Inlet Gauge		Delivery Gauge	
			Range (PSIG)	Graduations (PSIG)	Range (PSIG)	Graduations (PSIG)
823	6,000	0 - 500	0 - 10,000	200	0 - 1,500	100
824	6,000	0 - 1,000	0 - 10,000	200	0 - 1,500	100
825	6,000	0 - 2,000	0 - 10,000	200	0 - 4,000	100
826	6,000	0 - 4,000	0 - 10,000	200	0 - 6,000	100
827	6,000	0 - 6,000	0 - 10,000	200	0 - 6,000	100

Option 1

Model Series	Outlet Pressure
823	500 PSIG
824	1000 PSIG
825	2000 PSIG
826	4000 PSIG
826	6000 PSIG



Option 2

Outlet Fitting	
00	None
66	1/4" Male NPT stainless steel needle valve

Option 3

CGA Inlet Fittings	
00	None
09	CGA 580 brass
26	CGA 347 SST
27	CGA 677 SST
28	CGA 680 SST

Max CGA Pressure
3000 PSIG
5500 PSIG
10,000 PSIG
6,000 PSIG

Twin Pack / Flowmeter Regulators

Series 30™ Twin Pack Regulators

Rugged medium duty industrial grade regulators are extremely durable and contain Smith's exclusive Sure Seat™ filtered seat technology for extended seat and regulator life. Filtered seat prevents contamination from entering the seating area reducing repair costs and down-time. Regulators are manufactured with a rugged forged body and corrosion resistance bright nickel-plated bonnet for added product durability. Series 30™ are American made and backed by a 3 year limited warranty.

- Highly accurate pressure gauges with shatter resistant lenses.
- High capacity flow capabilities of over 2800 SCFH with oxygen.
- Sensitive heavy duty laminated Neoprene® diaphragm- provides sensitivity for highly accurate operation.
- Dual safety features- Self re-heating external pressure relief valve and diaphragm is designed to rupture if high pressure seat fails.



Part No. HTP2

Part No.	Regulator	Delivery Pressure	Inlet Connection	Gas Used
HTP2	30-100-540	0-75 PSIG	CGA 540	Oxygen
	30-15-510	0-15 PSIG	CGA 510	LP/Acetylene
HTP5	30-100-540	0-75 PSIG	CGA 540	Oxygen
	30-15-300	0-15 PSIG	CGA 300	Acetylene

Flowmeter Regulators

Series 30™

Rugged medium duty industrial grade regulators provide efficient and accurate regulation. Has many features found in more expensive regulators. Contains Smith's exclusive Sure Seat™ filtered seat technology for extended seat and regulator life. Filtered seat prevents contamination from entering the seating area reducing repair costs and down-time. Regulators are manufactured with a rugged forged body with bright nickel-plated bonnet with are American made and backed by a 3 year limited warranty.

- **Flowmeter Tube** has a unique ball guide that centers the ball float in the flow tube and keeps it centered. Other tubes must stand absolutely perpendicular to assure flow accuracy. Without Smith's exclusive self-centering flow tube the ball may float off center and the actual gas flow can be up to 2-1/2 times greater than is indicated.
- **Lexan™ Flow Tube** is highly accurate and shatter resistant.

Series 30™ Single Stage Flowmeter Regulators-Lexan™ Flow Tube



Part No. 32-80-580-6

Part No.	Gas Used	Flow Range	Preset Delivery Pressure	Flowmeter	Inlet Connection	Outlet Connection	Maximum Inlet Pressure
32-80-580-6	Argon/CO ₂	0 - 80 SCFH	80 PSIG	H1103E	CGA 580	5/8" - 18 RH Internal	3000 PSIG
32-80-320-6	CO ₂	0 - 80 SCFH	80 PSIG	H1103E	CGA 320	5/8" - 18 RH Internal	3000 PSIG
*32-30-580-6 Selec-O-Gas™	Argon/CO ₂	0 - 60 SCFH	30 PSIG	H1230E	CGA-580	5/8" - 18 RH Internal	3000 PSIG
	Helium	0 - 190 SCFH	30 PSIG	H1230E	CGA-580	5/8" - 18 RH Internal	3000 PSIG
	General/Any Gas	0 - 10 Range	30 PSIG	H1230E	CGA-580	5/8" - 18 RH Internal	3000 PSIG

NOTE: Includes 6' hose with inert hose connections.

* Selec-O-Gas™ Regulator does the jobs of more than 3 common flowmeters. Has 3 separate scales: Argon/CO₂, Helium & General Gas.

H2051 Single Stage Flowmeter Regulator - Economy

Exceptional value and compact design, provides precise shield gas regulation for MIG and TIG welding applications and more. Shatter resistant polycarbonate flow tube features triple scale for Argon, Helium and Argon/ CO₂ and has a packless O-ring flow tube seal which reduces maintenance. Built-in rupture disc reduces possibility of flow tube damage due to high pressure inlet surge. Precision flow adjustment valve locks flow at desired setting. Regulator features 3 year limited warranty.



Part No. H2051-580H

Part No.	Gas Used	Flow Range	Preset Delivery Pressure	Inlet Connection	Outlet Connection	Maximum Inlet Pressure
H2051-580	Argon/CO ₂	0 - 50 SCFH	50 PSIG	CGA 580	5/8" - 18 RH Internal	3000 PSIG
H2051-580H*	Argon, Helium					

* Includes 6' hose with inert hose connections.

Flow Gauge / Flowmeter / Flashback Arrestors

Series 30™ Single Stage Flow Gauge

Rugged medium duty industrial grade flow gauge regulators are extremely durable and contain Smith's exclusive Sure Seat™ filtered seat technology for extended seat and regulator life.

Filtered seat prevents contamination from entering the seating area reducing repair costs and down-time. Regulators are manufactured with a rugged forged body and corrosion resistant bright nickel-plated bonnet for added product durability. Series 30™ are American made and backed by a 3 year warranty.

- High capacity flow capabilities of over 50 SCFH.
- Highly accurate pressure gauges with shatter resistant lenses.
- Sensitive heavy duty laminated Neoprene® diaphragm- provides sensitivity for highly accurate operation.
- Dual safety features- Self re-seating external pressure relief valve and diaphragm is designed to rupture if high pressure seat fails.
- 0-4000 psi inlet gauge.



Part No. 31-50-580

Part No.	Gas Used	Delivery Range	Inlet Connection	Outlet Connection
31-50-580	Argon	10 - 50 SCHF	CGA 580	5/8" - 18 RH Internal
31-50-580-6*	Argon	10 - 50 SCHF	CGA 580	5/8" - 18 RH Internal

* Includes 6' hose with inert hose connections.

Heavy Duty Flowmeters

Flowmeter assemblies are designed to operate at an inlet pressure of 30 PSIG (except H1103 which is designed to operate at an inlet pressure of 80 PSIG). They may be attached to regulators or pipeline installations. All flowmeters have 1/4" NPT female inlets. 1 year limited warranty.

- Flow tube is extra long and is accurate to within 3% of the full scale reading. Tubes are made of shatter resistant Lexan™.
- Flow tube has a unique ball guide which centers the ball in the tube and keeps it centered. A ball float in a non-centering tube allows the ball to float off-center and will result in greater flows than the reading indicates.

Selec-O-Gas™ Flow Tube- Just rotate the outer tube to the scale you desire for: Argon, CO₂, Helium, or General/Any Gas.



Part No. H1103E

NOTE: Read center of ball on all Smith Flowmeters.



Part No.	Gas Used	Flow Range	Tube No.	Inlet Connection	Outlet Connection	Preset Delivery Pressure
H1103E	Argon/ CO ₂	0-80 SCFH	13220	1/4" NPT male	5/8" - 18 RH Internal	80 PSIG
H1230E Selec-O-Gas™	Argon/ CO ₂ General, Helium	Various	14254	1/4" NPT male	5/8" - 18 RH Internal	30 PSIG

CAUTION: Do Not Connect Flowmeters Directly to Gas Cylinder.

NOTE: When using Argon/CO₂ mix, read Argon scale.

Flashback Arrestors

- Built-in check valve prevents the reverse flow of gas.
- Requires no manual reset.
- Easy to install- attaches to standard "B" fittings.
- High quality brass construction, case is rugged and corrosion resistant.
- Sintered stainless steel filter stops flashback fire.



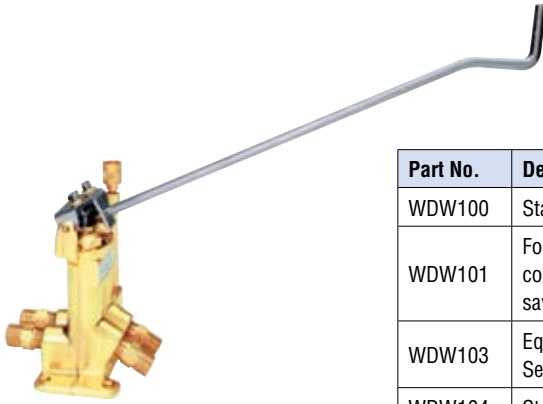
Part No. H753

Part No.	Description	Gas
H743	Regulator Mount (for use with CGA "B" male fitting)	Oxygen and fuel gas pair
H753	Torch Mount (high flow)	Oxygen and fuel gas pair

Gasaver™

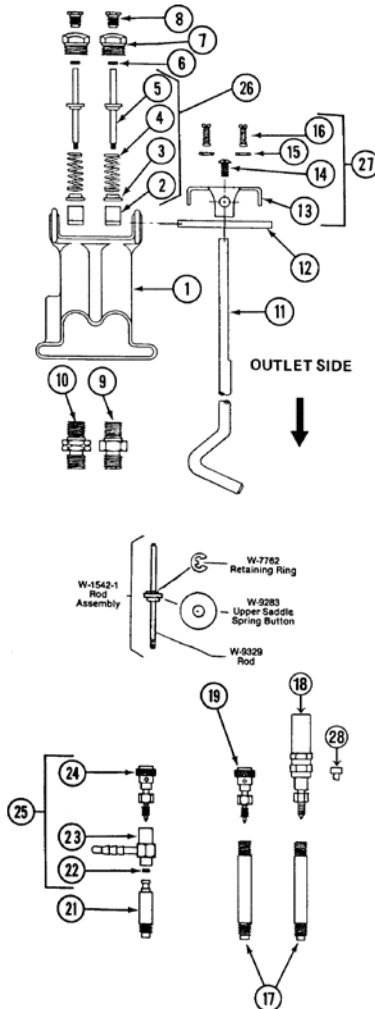
Smith Gasaver™
The Original Gas Saving Method of Cutting Production Cost

Oxygen and acetylene consumption cut up to 25 or 30 percent. Many users consider the increase in working operations soon pays for the small cost of the Gasaver™. Used by America's largest production plants. Listed as standard by Underwriters Laboratory and the New York City Board of Standards and Appeals.



Part No.	Description
WDW100	Standard Gasaver™ for use of MAPP® or propylene gas and oxygen.
WDW101	For general use on all types of acetylene and oxygen operations. Gasavers™ can be installed in any convenient location on the line between regulators and torch. The closer the torch, the greater the savings in oxygen and acetylene.
WDW103	Equipped with separate pilot fuel inlet for use with low pressure gas with injector type torches. Separate source of high pressure pilot gas required.
WDW104	Standard Gasaver™ equipped with Pilot Light for use with propane or natural gas at 2 PSI or more.

Gasaver™ Replacement Parts



Reference No.	Part No.	Description	Quantity Needed
1	WDW9303	Body	1
2	WDW84461	Seat	2
3	WDW9328	Lower saddle spring button	2
4	WDW7809	Spring	2
5	WDW15421	Rod assembly, plunger	2
6	14613-18	O-ring	2
7	WDW6183	Plunger rod bushing	2
8	WDW6045	Packing nut	2
9	13897	Oxygen inlet/outlet	2
	WD1030128	Water inlet/outlet	2
10	13896	Gas inlet/outlet	2
	4872	Inert inlet/outlet	2
11	WDW9286	Lever	1
12	WDW9315	Pinion rod	1
13	WDW880510	Saddle	1
14	WDW7730	Lever rod lock screw	1
15	WDW7887	Adjusting screw lock nut	2
16	WDW7736	Adjusting screw	2
17	15163	Pilot light tube	1
18	WDW17401	Pilot - MAPP®- W-100	1
19	WDW1507	Pilot light - acetylene- W-101	1
	WDW9324	Lava pilot light tip	1
21	WDW6702	Pilot base for W-103	1
22	7613	Set screw for W-103	1
23	WDW1506	Pilot adapter W-103	1
24	WDW1508	Pilot light, natural gas W-103; W-104	1
25	WDW1533	Pilot light assembly for W-103	1
26	WDW15661	Plunger assembly	1
27	WDW10005	Saddle assembly	1
28	WDL6071	Orifice	1

Gas Mixers

Proportional Gas Mixers

Various welding and process manufacturing jobs require different mixes of gas for the best performance. Smith's proportional gas mixer allows on-site mixing of gases eliminating inventory and handling of costly premixed gases. Individual gases can be mixed for specific welding or other industrial requirements resulting in improved performance. Controlling the gas mixtures will result in lower costs and better welds.

Part No.	Description	Gases	Adjustment % Range	Required Inlet Pressure/Gas PSIG/Bar	Outlet Pressure Without Flow PSIG/Bar	Flow Rate SCFH LPM	Inlet Fittings	Outlet Fittings
299-006-1B	2 gas mixer std. capacity 180 SCFH	Argon CO ₂	0-100% 100-0%	55-100 3.79-14.5	45 3.1	10-180 4.8-85.7	5/8"-18 RH internal	5/8"-18 RH internal
299-006-3B	2 gas mixer std. capacity 180 SCFH	Argon Helium	0-100% 100-0%	55-100 3.79-14.5	45 3.1	10-180 4.8-85.7	5/8"-18 RH internal	5/8"-18 RH internal
299-011-1B	2 gas mixer std. capacity 180 SCFH	Argon Hydrogen	50-100% 50-0%	55-100 3.79-14.5	45 3.1	10-180 4.8-85.7	5/8"-18 RH internal	5/8"-18 RH internal
299-016-1B	2 gas mixer high capacity 700 SCFH	Argon CO ₂	0-100% 100-0%	105-115 7.3-7.9	50 3.45	20-700 9.4-330	1/4" FNPT	1/2" FNPT
299-016-16B	2 gas mixer high capacity 700 SCFH	Argon Hydrogen	50-100% 50-0%	105-115 7.3-7.9	50 3.45	20-700 9.4-330	1/4" FNPT	1/2" FNPT
299-039B	3 gas mixer std. capacity 180 SCFH	Argon Oxygen CO ₂	85-100% 0-15% 0-15%	105-115 7.3-7.9	50 3.45	10-180 4.8-85.7	5/8"-18 RH internal	5/8"-18 RH internal



Standard 2 Gas 180 SCFH Mixer



High Capacity 2 Gas 700 SCFH Mixer



Standard 3 Gas 180 SCFH Mixer